



# FEDFLEET 2004

Leadership  
Teaming  
Communication  
Employee Support  
Strategic Thinking  
Organizational Climate

## Tire Support During Operation Iraqi Freedom





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- U.S. News & World Report  
April 12, 2004
- **Washington Whispers**
- **Burning Rubber**
- What keeps the Army's top supply officer awake at night? Not terrorists--tires. That's because the humvees sent to Iraq are being reinforced with heavy armor, and that's doing a real number on the rubber, says Gen. Paul Kern, head of Army Materiel Command. Since December, the Army has shipped 63,000 tires to Iraq. In Balad, 42 miles north of Baghdad, the trucks line up daily for new rubber at what's dubbed the Humvee Service Station.



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## TACOM Tire Group

- **DOD Integrated Manager for all ground vehicle tires and tire products since 1992.**
- **Located in Warren, MI**
- **Manage approximately 700 NSNs**

## TIRES AND TIRE PRODUCT SUPPORT to OIF

- **FY 03 Sales = \$241M**
- **FY 04 Sales = \$102M**
- **Average Yearly Sales = \$60M**



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## OIF Tire Issues

**Extremely High Tire  
Usage  
Rates in Theater due to:**

- **OPTEMPO/High  
Speeds**
- **Vehicle Overloading**
- **Road Hazards**
- **Improper Wheel  
Alignment**





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## Road Hazards in Iraq Affect Convoy Operations and Increase Tire Usage



Degraded pavement conditions. Potholes are 4 to 10 inches deep. Areas where asphalt is blown out continues to degrade as the subgrade is damaged due to heavy traffic.



Sharp drop offs with no shoulder.



Severe curb in median. Heavy transport trucks that are used by local personnel are old and very slow as evidenced by this 1950s era truck hauling gravel processing equipment of approximately the same age.





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## Tire Failure Modes



**High Mileage Wear out (OPTEMPO)**



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## Tire Failure Modes



**High Load Impact Fracture**



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## Tire Failure Modes



**Road Hazards**





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## Tire Failure Modes

### VEHICLE OVERLOADING





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## Tire Failure Modes

### WHEEL ALIGNMENT





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## **TACOM actions to meet customer tire needs:**

- **Worked with manufacturers to increase production rates**
- **Shipment from overseas production facilities**
- **Testing alternate tires**
- **Purchase and deployment of six Mobile Tire Service Centers: Iraq - 4, Afghanistan - 1 and Kuwait - 1**



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- Sequence of Events – MTSC Deployment
  - Request for Assistance from CFLCC
  - Briefing to Army Strategic Planning Board (ASPB) – Oct. 03
  - Approval of Requirement by ASPB – Oct. 03
  - Contract Award – Nov. 03, to Wheel Systems International
  - Operator Training Course – Dec. 03
  - First MTSC Delivered to Iraq - Jan. 04
  - Award of Follow-On Contract for 5 MTSCs Jan. 04
  - First Follow-On Delivery – May 04
  - Operator Training Course – June 04
  - Remaining MTSCs Delivered - June/July 04



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## MOBILE TIRE SERVICE CENTER (MTSC)

Manual  
Repair



Machine  
Assisted



Six MTSCs are fielding to SWA. The MTSC is an ISO Container that expands to a portable 8'x8x20' tire workshop containing the tools and equipment necessary to perform tire repair. Our first MTSC was fielded to Iraq in Jan 04 the second to Afghanistan in June 04. Four additional units will be fielded to SWA by Jul 04.





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## Tire Changing Operations in Iraq

### Pre - MTSC



### Using MTSC





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## MTSC Description:

- Hard sided Shipping Container, Packed = 8'X8'x20, Expanded = 8'X20'X20'
- 20kw generator with 4cyl diesel engine (JP8 compatible). 5hp -2 stage air compressor w/20 gal. reservoir, 175 psi capacity
- Horizontal Runflat Press
- Truck Tire Changing Machine
- Tire Cage
- ½ Ton Jib Crane and 2 Ton Winch
- Two 18,000 BTU AC/Heat Pumps
- Dunk Tank, Tire Spreader and Assorted Air and Hand Tools
- Super Therm Paint Job
- Spare Parts
- Cost approximately \$235K each



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- MTSC Capabilities:
  - Capable of Repairing all tire and wheel assemblies including:
    - 15" – 20" 1 pc. drop center wheel assemblies
    - 15" – 44' 3 pc. wheel assemblies
    - 15" – 20" 2 pc. Wheel assemblies with/without Bead locks and Variable Function Inserts (VFI)
- MTSC Advantages:
  - Safety, Speed, Ease of Use
- Capacity:
  - Per Contractor: 3 HMMWV Assemblies per hour
  - Per MAC Chart: 1 HMMWV Assembly every two hours
- Customer Response:
  - Excellent



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- The Future:

Support Concept is Evolving

Buy More MTSCs?

Add to TO&E?

Establish LIN and NSN?

Put in DOLs to Support Two-Level Maintenance?